

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: not yet assigned  
Filing Date: not yet assigned  
Applicant: Schmidt et al.  
Group Art Unit: not yet assigned  
Examiner: not yet assigned  
Title: Process for Short-Time Arc Welding and Short-Time Arc-Welding System  
Attorney Docket: 0275M-000864

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Director of the United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

**I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION**

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

**II. COPIES**

A. \_\_\_\_ Submitted herewith is a legible copy of (i) each U.S. patent application publication and U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; (iii) for each cited pending U.S. application, the application specification including the claims, and any drawing of the application which caused it to be listed including the claims directed to that portion; and (iv) all other information or that portion which caused it to be listed.

B. \_\_\_\_ Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial Number

U.S. Filing Date

C. X Because the present application was/is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.

D. \_\_\_\_ This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search Report are listed on the attached Form-1449 for consideration by the Examiner and for listing on any patent resulting from this application. Since the International Search Report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g))

III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

A. X Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).

B. X A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):

1. \_\_\_\_ See the attached foreign patent office communication from a counterpart foreign application:
2. \_\_\_\_ English translations are provided:
3. X Other:

International search report for PCT/EP02/08149 dated 12/12/02, 6 pages.

C. \_\_\_\_ The following additional information is provided for the Examiner's consideration.

IV. CROSS REFERENCE TO RELATED APPLICATION(S)

A. \_\_\_\_ The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. § 122.

Serial No.

Filing Date

Art Unit

V. THIS IDS IS BEING FILED UNDER

A. X **37 C.F.R. § 1.97(b):** (check only one box)

1. \_\_\_\_ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.

2. X within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.

3. \_\_\_\_ before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

4. \_\_\_\_ before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.

B. \_\_\_\_ **37 C.F.R. § 1.97(c):** (check only one box)

before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

1. \_\_\_\_ No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

2. \_\_\_\_ See the certification below. No fee is required.

C. \_\_\_\_ **37 C.F.R. § 1.97(d):**

after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.

1. \_\_\_\_ See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)

The undersigned hereby certifies that:

A. \_\_\_\_ each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. §

1.97(e)(1)). See further statement under 37 C.F. R. 1.704(d) below in section VII, if applicable; or

B. \_\_\_\_ no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).

C. \_\_\_\_ Some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

VII. STATEMENT UNDER 37 CFR 1.704(d)

The undersigned hereby states that:

\_\_\_\_ each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

VIII. PAYMENT OF FEES (check only one box)

A. \_\_\_\_ A check in the amount of \$180.00 is enclosed for the above-identified fee.

B. \_\_\_\_ Please charge Deposit Account No. 02-2550 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

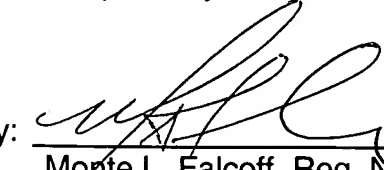
The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 02-2550.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 02-2550.

Respectfully submitted,

Dated: January 22, 2004

By:   
Monte L. Falcoff, Reg. No. 37,617  
Michael J. Lang, Reg. No. 51,120

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(248) 641-1600  
MLF/MJL/csd

<b>FORM HDP-1449 (Based on Form PTO-1449)</b>  <b>PATENT AND TRADEMARK OFFICE</b> <b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)  Sheet 1 of 1	ATTORNEY DOCKET NO.	SERIAL NO.
	0275M-000864	not yet assigned
	APPLICANT	
	Schmidt et al.	
	FILING DATE	GROUP
	not yet assigned	not yet assigned

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		6,225,590	5/2001	Farrow		
2.		5,449,877	9/1995	Buda et al.		
3.		5,662,820	9/1997	Schwiete et al.		
4.		5,434,382	7/1995	Schlattl et al.		
5.		6,660,965	12/2003	Simpson		
6.		5,676,867	10/1997	Van Allen		
7.		5,977,506	11/1999	von Daniken		

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes No	
1.							

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
1.		International Search Report for PCT/EP02/08149, dated 12/12/2002, 6 pages.

Examiner:	Date Considered:
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EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 02/08149

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 B23K9/20 B23K11/00 B23K9/095

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B23K G05F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 676 867 A (K. VAN ALLEN) 14 October 1997 (1997-10-14) column 1, line 7-10 column 6, line 8-67; figures 1,2,4	1-14
A	US 5 977 506 A (K. VON DAENIKEN) 2 November 1999 (1999-11-02) column 1, line 6-61 column 2, line 57 -column 4, line 33; figures 1,2	1-14
A	US 5 434 382 A (W. SCHLATT ET AL) 18 July 1995 (1995-07-18) column 1, line 27-43 column 12, line 20 -column 15, line 28; figure 8	1,13
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

3 December 2002

Date of mailing of the international search report

12/12/2002

Name and mailing address of the ISA

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 NL - 2280 HV Rijswijk  
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 Fax: (+31-70) 340-3016

Authorized officer

Jeggy, T

# INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 02/08149

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 5 449 877 A (P.R. BUDA ET AL)  12 September 1995 (1995-09-12)  column 1, line 7-19  column 4, line 22-42  column 6, line 31 -column 8, line 62;  figures 1,4A-C,5</p>	1,13
A	<p>US 5 662 820 A (B. SCHWIETE ET AL)  2 September 1997 (1997-09-02)  the whole document</p>	1,13



# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 02/08149

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5676867	A	14-10-1997	NONE	
US 5977506	A	02-11-1999	CH 688186 A5 DE 69515497 D1 DE 69515497 T2 EP 0784526 A1 ES 2144141 T3 WO 9610468 A1 JP 10509648 T	13-06-1997 13-04-2000 19-10-2000 23-07-1997 01-06-2000 11-04-1996 22-09-1998
US 5434382	A	18-07-1995	DE 4305364 C1 AT 138304 T CA 2108617 A1 CN 1085838 A ,B CZ 9500998 A3 DE 4332807 A1 WO 9408749 A1 DE 9312489 U1 DE 59302678 D1 EP 0594086 A1 ES 2089674 T3 JP 6190566 A MX 9306512 A1 PL 308481 A1 ZA 9307701 A	28-04-1994 15-06-1996 21-04-1994 27-04-1994 17-01-1996 21-04-1994 28-04-1994 11-11-1993 27-06-1996 27-04-1994 01-10-1996 12-07-1994 29-04-1994 07-08-1995 16-05-1994
US 5449877	A	12-09-1995	AU 676931 B2 AU 7243994 A DE 69422195 D1 DE 69422195 T2 EP 0739259 A1 WO 9517989 A1 ZA 9404166 A	27-03-1997 17-07-1995 20-01-2000 21-09-2000 30-10-1996 06-07-1995 09-02-1995
US 5662820	A	02-09-1997	DE 19509172 C1 EP 0732167 A2 JP 2959466 B2 JP 9094666 A	29-08-1996 18-09-1996 06-10-1999 08-04-1997

# INTERNATIONALER RECHERCHENBERICHT

Internationales Aktenzeichen

PCT/EP 02/08149

## A. KLASSIFIZIERUNG DES ANMELDUNGSGEGENSTANDES

IPK 7 B23K9/20 B23K11/00 B23K9/095

Nach der Internationalen Patentklassifikation (IPK) oder nach der nationalen Klassifikation und der IPK

## B. RECHERCHIERTE GEBIETE

Recherchierte Mindestprüfstoff (Klassifikationssystem und Klassifikationssymbole)

IPK 7 B23K G05F

Recherchierte aber nicht zum Mindestprüfstoff gehörende Veröffentlichungen, soweit diese unter die recherchierten Gebiete fallen

Während der Internationalen Recherche konsultierte elektronische Datenbank (Name der Datenbank und evtl. verwendete Suchbegriffe)

EPO-Internal, WPI Data, PAJ

## C. ALS WESENTLICH ANGESEHENE UNTERLAGEN

Kategorie*	Bezeichnung der Veröffentlichung, soweit erforderlich unter Angabe der in Betracht kommenden Teile	Betr. Anspruch Nr.
A	US 5 676 867 A (K. VAN ALLEN) 14. Oktober 1997 (1997-10-14) Spalte 1, Zeile 7-10 Spalte 6, Zeile 8-67; Abbildungen 1,2,4	1-14
A	US 5 977 506 A (K. VON DAENIKEN) 2. November 1999 (1999-11-02) Spalte 1, Zeile 6-61 Spalte 2, Zeile 57 -Spalte 4, Zeile 33; Abbildungen 1,2	1-14
A	US 5 434 382 A (W. SCHLATTI ET AL) 18. Juli 1995 (1995-07-18) Spalte 1, Zeile 27-43 Spalte 12, Zeile 20 -Spalte 15, Zeile 28; Abbildung 8	1,13
	-/-	

☒ Weitere Veröffentlichungen sind der Fortsetzung von Feld C zu entnehmen

☒ Siehe Anhang Patentfamilie

\* Besondere Kategorien von angegebenen Veröffentlichungen :

\*A\* Veröffentlichung, die den allgemeinen Stand der Technik definiert, aber nicht als besonders bedeutsam anzusehen ist

\*E\* älteres Dokument, das jedoch erst am oder nach dem internationalen Anmeldedatum veröffentlicht worden ist

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\*X\* Veröffentlichung von besonderer Bedeutung; die beanspruchte Erfindung kann allein aufgrund dieser Veröffentlichung nicht als neu oder auf erfinderischer Tätigkeit beruhend betrachtet werden

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\*Z\* Veröffentlichung, die Mitglied derselben Patentfamilie ist

Datum des Abschlusses der Internationalen Recherche

3. Dezember 2002

Absenddatum des Internationalen Recherchenberichts

12/12/2002

Name und Postanschrift der Internationalen Recherchenbehörde  
Europäisches Patentamt, P.B. 5618 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3018

Bevollmächtigter Bediensteter

Jeggy, T

# INTERNATIONALER RECHERCHENBERICHT

Internationales Aktenzeichen

PCT/EP 02/08149

## C.(Fortsetzung) ALS WESENTLICH ANGESEHENE UNTERLAGEN

Kategorie*	Bezeichnung der Veröffentlichung, soweit erforderlich unter Angabe der in Betracht kommenden Teile	Betr. Anspruch Nr.
A	US 5 449 877 A (P.R. BUDA ET AL) 12. September 1995 (1995-09-12) Spalte 1, Zeile 7-19 Spalte 4, Zeile 22-42 Spalte 6, Zeile 31 -Spalte 8, Zeile 62; Abbildungen 1,4A-C,5 -----	1,13
A	US 5 662 820 A (B. SCHWIETE ET AL) 2. September 1997 (1997-09-02) das ganze Dokument -----	1,13

## INTERNATIONALER RECHERCHENBERICHT

Angaben zu Veröffentlichungen, die zur selben Patentfamilie gehören

Internationales Aktenzeichen

PCT/EP 02/08149

Im Recherchenbericht angeführtes Patentdokument		Datum der Veröffentlichung	Mitglied(er) der Patentfamilie		Datum der Veröffentlichung
US 5676867	A	14-10-1997	KEINE		
US 5977506	A	02-11-1999	CH	688186 A5	13-06-1997
			DE	69515497 D1	13-04-2000
			DE	69515497 T2	19-10-2000
			EP	0784526 A1	23-07-1997
			ES	2144141 T3	01-06-2000
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			JP	10509648 T	22-09-1998
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			AT	138304 T	15-06-1996
			CA	2108617 A1	21-04-1994
			CN	1085838 A ,B	27-04-1994
			CZ	9500998 A3	17-01-1996
			DE	4332807 A1	21-04-1994
			WO	9408749 A1	28-04-1994
			DE	9312489 U1	11-11-1993
			DE	59302678 D1	27-06-1996
			EP	0594086 A1	27-04-1994
			ES	2089674 T3	01-10-1996
			JP	6190566 A	12-07-1994
			MX	9306512 A1	29-04-1994
			PL	308481 A1	07-08-1995
			ZA	9307701 A	16-05-1994
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			AU	7243994 A	17-07-1995
			DE	69422195 D1	20-01-2000
			DE	69422195 T2	21-09-2000
			EP	0739259 A1	30-10-1996
			WO	9517989 A1	06-07-1995
			ZA	9404166 A	09-02-1995
US 5662820	A	02-09-1997	DE	19509172 C1	29-08-1996
			EP	0732167 A2	18-09-1996
			JP	2959466 B2	06-10-1999
			JP	9094666 A	08-04-1997